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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,028	. 07/29/2003	Ge Yi	S01.12-0988/STL 11281.00	7629
	7590 12/18/200 CHNOLOĞY LLC C/C	EXAMINER		
CHAMPLIN & KELLY, P.A. SUITE 1400 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3319			TUGBANG, ANTHONY D	
			ART UNIT	. PAPER NUMBER
			3729	
			MAIL DATE	DELIVERY MODE
			12/18/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.	Applicant(s)
10/629,028	YI ET AL.
Examiner	Art Unit
A. Dexter Tugbang	3729

Before the Filing of an Appeal Brief --The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 20 November 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. X The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: a) The period for reply expires <u>3</u> months from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed. may reduce any earned patent term adjustment. See 37 CFR 1.704(b). **NOTICE OF APPEAL** 2. The Notice of Appeal was filed on _ . A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). **AMENDMENTS** 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below); (b) They raise the issue of new matter (see NOTE below): (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: _____. (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). 5. Applicant's reply has overcome the following rejection(s): See Attachment. 6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7. 🛛 For purposes of appeal, the proposed amendment(s): a) 🗌 will not be entered, or b) 🖾 will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: 1-8 and 19-24. Claim(s) objected to: 32. Claim(s) rejected: 31 and 33-36. Claim(s) withdrawn from consideration: 25-30. AFFIDAVIT OR OTHER EVIDENCE 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e). 9.

The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER 11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because:

12. Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s).

13.

☐ Other: See Attachment.

A. Dexter Tugbang **Primary Examiner** Art Unit: 3729

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Attachment to Advisory Action

1. The applicant(s) arguments, see After Final response filed on November 20, 2006, with respect to the rejections of Claims 1, 7, 8, 19, 24 and 32 in the last Office Action (Final Rejection, mailed on September 19, 2006) have been fully considered and are persuasive to the extent as follows.

Regarding each of Claims 1, 19 and 32, the applicant(s) arguments are persuasive and fully incorporated by reference herein, with respect the features of "reducing...shell portion" (lines 7-10 of Claim 1) and "reducing...the junction" (lines 7-9 of Claim 19), and Claim 32 in its entirety. The examiner notes that the prior art does indeed teach forming a constricted junction and implanting ions of a non-ferromagnetic element in the manner described in the last Office Action (Final Rejection, mailed on September 19, 2006). However, these features achieved by the prior art are to establish very different magnetic electrical and magnetic properties. The prior art does not explicitly teach or mention reducing the magnetic and electrical conductivity of an outer shell portion of the junction (emphasis added).

Therefore, the rejections with respect to Claims 1, 7, 8, 19, 24 and 32 have been withdrawn.

NOTE: Since Claims 1 and 19 are linking claims, the restriction requirement between Groups I-A through I-D (see paragraphs 5-8 in the Restriction Requirement mailed on July 21, 2005) has been withdrawn. Therefore, Claims 2 through 6 and 20 through 23 have been rejoined with Claims 1 and 19 and fully examined for patentability.

2. However, since the restriction requirement is maintained between the inventions of Groups I and II, Claims 25 through 30 continue to stand as being withdrawn from further

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consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on December 15, 2005.

- 3. Regarding Claims 31 and 33 through 36, the previous rejections in the last Office Action (Final Rejection, mailed on September 19, 2006) are hereby maintained. In response to applicant's arguments against the references individually (i.e. Knapp et al, Tao et al and Segar et al), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).
- 4. Claims 1 through 8 and 19 through 24 are allowed.
- 5. Claim 32 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.